

REMARKS

Claims 1-7 remain in the application, the claims having been editorially amended.

Reconsideration of the application and allowance of all claims are respectfully requested in view of the above amendments and the following remarks.

Regarding consideration of USP 4,924,500, applicants submitted a copy of the patent and a concise statement of relevance. The concise statement of relevance was in the form of a search report listing all of the references to be considered as well as identifying the relevant portions thereof. So in fact two lists were submitted setting forth all of the references to be considered. 37 CFR 1.98(a) requires that a list of the references be submitted, but does not say that the list will not be considered if it is not a Form PTO 1449 list. So the requirements of 37 CFR 1.98 have been met, and consideration of the reference is mandatory.

Further, compliance with the requirements of 37 CFR 1.98 makes consideration of the prior art mandatory, but failure to comply with all of the requirements does not mean that the examiner cannot consider the art, only that he does not have to if he does not want to. If the examiner considers the obvious typographical error here to be grounds for not considering prior art that has been physically placed in front of him with a statement of relevance included, that is unfortunate.

As to the allegedly defective declaration, the examiner is correct that the signature of Christian Laroque has not been provided. But this application was pending for three years while applicants sought to have the USPTO grant permission to proceed under Rule 47(a) without the signature of Christian Laroque. Rule 47(a) status was granted, and no signature of Mr. Laroque is necessary at this time.

Editorial amendments have been made to address the issues raised by the examiner in paragraphs 3-7 of the Office action, although it is noted that there is nothing objectionable about the term “and/or” in the specification.

The prior art rejections stated in paragraphs 8-12 of the Office action are respectfully traversed.

There are several problems to which the present invention is directed, all related to the use of signaling channels. The first problem to which the present invention is directed is how to handle the failure of a signaling channel. The background discussion points out that it was known in the prior art to distribute the various paths of an access on a common physical medium, but this is a problem in that if the physical medium is down, here is no communication possible of any sort. An improvement in this is to implement the different types of channels on different physical media, but there is still a problem in that if the physical medium on which the signaling path is implement fails, it is not possible to set up any further calls. The present invention addresses this problem by providing at least one back-up, assigning a priority to the various signaling channels, and then using the highest priority signaling channel that is available.

Kim teaches an arrangement wherein channel capacity of a single medium is allocated between B channels and D channels. This is the same as prior art already acknowledged in the Background of the present application. While claim 1 of the present application does not require that the B and D channels be on separate physical media, it does require assigning priorities and testing to see if the highest priority signaling channel is functional. This is not something that would be done in an arrangement like Kim.

The examiner acknowledges the shortcoming of Kim, but then cites Kato for this teaching.

Turning first to claim 7 and the rejection of that claim in paragraph 9 of the Office action, the novel subject matter of claim 7 is the provision of a common signaling channel that handles signaling for two different accesses. Note that this is not simply common for two different channels within the same access, but for two different accesses. Kim describes a T-carrier 7 between remote terminal 92 and central station 93. There is no discussion of having multiple accesses, just a single T-carrier link. Since claim 7 requires at least two accesses, with the common signaling channel carrying signals relating to at least two accesses, and with the two accesses being managed using the signals delivered by the common signaling channel, this cannot be taught by Kim which does not teach two accesses between two exchanges. Accordingly, withdrawal of the anticipation rejection of claim 7 is respectfully requested. Claim 6 has been amended to now also recite the use of a D channel in a different physical medium from the B channels it supports.

Turning to claims 1 and 3-6, independent claim 1 is directed to the problem of how to handle the failure of a signaling channel. The invention can be better understood first from a discussion of the prior art. Considering only the access 7, the specification points out that a conventional T2 access would include 24 channels 4 as well as a signaling channel 5 and a maintenance channel 6. In this conventional arrangement, the single signaling channel 5 would be shared by all 24 of the channels 4. The problem occurs when the physical channel 5 fails, and there is nothing to carry the signaling information for any of the channels 4.

The present invention addresses this problem by providing at least one back-up, assigning a priority to the various signaling channels, and then using the highest priority signaling channel that is available. Thus, for example, under normal circumstances the path 5 would carry the signaling information for all of the paths 4, and if the path 5 fails then the system would switch to a backup path to carry the signaling information that would otherwise have been carried by the path 5.

Kim teaches an arrangement wherein channel capacity of a single medium is allocated between B channels and D channels. This is the same as prior art already acknowledged in the Background of the present application. Kim does teach the dynamic allocation of D channel resources, but does not teach the fundamental concept of the present invention. Regardless of how the D channel requirements are ordinarily satisfied, if the physical path on which they are carried fails, there will be no D channel signaling. The present invention provides a backup that Kim does not teach.

With respect first to claim 4, this claim is directed to the feature of the invention whereby the number of B channels in operation is reduced to a level supportable by the functionality of the determined functionality of the D channel. The examiner has taken official notice of the practice of neutralizing one or more B channels if the D channel is not functioning properly, but applicants respectfully request citation of prior art teaching this if the examiner maintains that the prior art teaches the feature recited in claim 4, as now amended for clarification. Note that the present invention does not eliminate all B channels supported by the D channel when the D channel is not operations, but *reduces* the number of B channels when the D channel capacity is insufficient, e.g., when the bit rate of the signaling channel is insufficient.

As to claims 1, 3, 5 and 6, claim 1 has been amended to reflect the feature of the present invention whereby the different signaling channels are on different physical media. This is not shown or suggested in Kato.

For the above reasons, it is submitted that the invention defined in the present claims is neither shown nor suggested by the prior art, and allowance of all claims is respectfully requested. If there are any issues remaining in order to place the case in condition for allowance, the examiner is respectfully requested to contact the undersigned at the local exchange listed below.

in the would not have been obvious Please charge our Deposit Account 19-4880 for the petition fee if required. Please charge any additional fees under 37 C.F.R. § 1.16 or § 1.17 necessary to keep this application pending in the Patent and Trademark Office or credit any overpayment to Deposit Account No. 19-4880. A duplicate copy of this sheet is enclosed.

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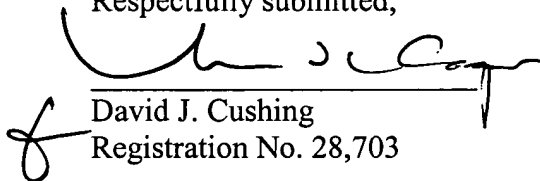


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